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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB 03/03028

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G02B6/28 G02B6/125

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 236 784 B1 (IDO TATEMI) 22 May 2001 (2001-05-22) cited in the application figure 15	1-8
Y	column 14, line 45 - line 48 column 17, line 30 - line 34 column 12, line 13 column 8, line 4 - line 6 column 14, line 63 - line 66	9, 10
Y	EP 0 811 860 A (LUCENT TECHNOLOGIES INC) 10 December 1997 (1997-12-10) page 6, line 3 - line 9 figure 7	9, 10

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*G\* document member of the same patent family

Date of the actual completion of the international search

20 October 2003

Date of mailing of the international search report

05/11/2003

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PCT/GB 03/03028

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 368 131 A (MARCONI CASWELL LTD) 24 April 2002 (2002-04-24) figure 3 page 7, line 24 - line 26 page 7, line 18 - line 20 page 7, line 1 - line 2 page 7, line 28 - line 33	1-10
X, P	KEH-YI LEE, JAU-ANN SHEN, WEI-CHIH TSAI, FU-CHIANG CHANG, KUO-CHANG LO: "New type of 1x3 MMI optical power dividers with reverse taper section" JOURNAL OF OPTICAL COMMUNICATIONS, XP009019114 figure 1	1-7
A	ZIRNGIBL M ET AL: "EFFICIENT 1 X 16 OPTICAL POWER SPLITTER BASED ON INP" ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 28, no. 13, 18 June 1992 (1992-06-18), pages 1212-1213, XP000301390 ISSN: 0013-5194 figure 1	8
A	KRUEGER S ET AL: "Design and realization of a novel polymer-based single-mode integrated optical beam splitter" MOEMS AND MINIATURIZED SYSTEMS, SANTA CLARA, CA, USA, 18-20 SEPT. 2000, vol. 4178, pages 77-87, XP002257830 Proceedings of the SPIE - The International Society for Optical Engineering, 2000, SPIE-Int. Soc. Opt. Eng, USA ISSN: 0277-786X figure 8	6
A	LORENZO R M ET AL: "Improved self-imaging characteristics in 1 Nmultimode couplers" IEE PROCEEDINGS: OPTOELECTRONICS, INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB, vol. 145, no. 1, 20 February 1998 (1998-02-20), pages 65-69, XP006011325 ISSN: 1350-2433 figure 1	1-5
P, A	US 2002/114572 A1 (BOUDA MARTIN) 22 August 2002 (2002-08-22) abstract	

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International Application No.  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	DE 101 21 007 A (PHOTON TECHNOLOGIES GMBH BREG) 14 November 2002 (2002-11-14) figure 1	1-8

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No  
PCT/GB 03/03028

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			WO 0231556 A1	18-04-2002
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